

**In the Specification:**

At page 1, please replace the priority claim at line 3 with the following updated priority claim:

This application is a continuation of U.S. Patent Application Serial No. 08/771,276, filed December 20, 1996, which is a continuation-in-part of U.S. Patent Application Serial No. 08/661,393 filed June 7, 1996, now U.S. Patent No. 6,268,477, which was in turn a continuation-in-part of U.S. Patent Application No. 08/575,967 filed December 20, 1995, now U.S. Patent No. 6,265,184.

At page 4, lines 20-32, please amend the paragraph as follows:

A promiscuous receptor that binds both CXC and CC chemokines has also been identified. This receptor was originally identified on red blood cells and *Horuk et al.*, *Science* 261:1182-1184 (1993) reports that it binds IL-8, NAP-2, GRO $\alpha$ , RANTES, and MCP-1. The erythrocyte chemokine receptor shares about 25% identity with other chemokine receptors and may help to regulate circulating levels of chemokines or aid in the presentation of chemokines to their targets. In addition to binding chemokines, the erythrocyte chemokine receptor has also been shown to be the receptor for plasmodium vivax, a major cause of malaria (id.) Another G-protein coupled receptor which is closely related to chemokine receptors, the platelet activating factor receptor, has also been shown to be the receptor for a human pathogen, the bacterium ~~Streptococcus~~ *Streptococcus pneumoniae* (*Cundell et al.*, *Nature* 377:435-438 (1995)).

At page 5, line 23, to page 6, line 32, please amend the paragraph as follows:

The present invention provides purified and isolated nucleic acids encoding chemokine receptors involved in leukocyte trafficking. Polynucleotides of the invention (both sense and anti-sense strands thereof) include genomic DNAs, cDNAs, and RNAs, as well as completely or partially synthetic nucleic acids. Preferred polynucleotides of the invention include the DNA encoding the chemokine receptor 88-2B that is set out in SEQ ID NO:3, the DNA encoding the chemokine receptor 88C that is set out in SEQ ID NO:1, and DNAs which hybridize to those DNAs under standard stringent hybridization conditions, or

which would hybridize but for the redundancy of the genetic code. Exemplary stringent hybridization conditions are as follows: hybridization at ~~42°C~~ 42°C in 50% formamide, 5X SSC, 20 mM sodium phosphate, pH 6.8 and washing in 0.2X SSC at 55°C. It is understood by those of skill in the art that variation in these conditions occurs based on the length and GC nucleotide content of the sequences to be hybridized. Formulas standard in the art are appropriate for determining exact hybridization conditions. *See Sambrook et al.*, §§ 9.47-9.51 *in* Molecular Cloning: A Laboratory Manual, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York (1989). Also contemplated by the invention are polynucleotides encoding domains of 88-2B or 88C, for example, polynucleotides encoding one or more extracellular domains of either protein or other biologically active fragments thereof. 88-2B extracellular domains correspond to SEQ ID NO:3 and SEQ ID NO:4 at amino acid residues 1-36, 93-107, 171-196, and 263-284. The extracellular domains of 88-2B are encoded by polynucleotide sequences corresponding to SEQ ID NO:3 at nucleotides 362-469, 638-682, 872-949, and 1148-1213. Extracellular domains of 88C correspond to SEQ ID NO:1 and SEQ ID NO:2 at amino acid residues 1-32, 89-112, 166-191, and 259-280. The 88C extracellular domains are encoded by polynucleotide sequences that correspond to SEQ ID NO:1 at nucleotides 55-150, 319-390, 550-627, and 829-894. The invention also comprehends polynucleotides encoding intracellular domains of these chemokine receptors. The intracellular domains of 88-2B include amino acids 60-71, 131-151, 219-240, and 306-355 of SEQ ID NO:3 and SEQ ID NO:4. Those domains are encoded by polynucleotide sequences corresponding to SEQ ID NO:3 at nucleotides 539-574, 752-814, 1016-1081, and 1277-1426, respectively. The 88C intracellular domains include amino acid residues 56-67, 125-145, 213-235, and 301-352 of SEQ ID NO:1 and SEQ ID NO:2. The intracellular domains of 88C are encoded by polynucleotide sequences corresponding to SEQ ID NO:1 at nucleotides 220-255, 427-489, 691-759, and 955-1110. Peptides corresponding to one or more of the extracellular or intracellular domains, or antibodies raised against those peptides, are contemplated as modulators of receptor activities, especially ligand and G protein binding activities of the receptors.

At page 32, lines 7-19, please amend the paragraph as follows: ,

Cell lines were stably transformed with 88C or 88-2B to further delineate the role of 88C and 88-2B in HIV infection. Kimpton and Emerman, "Detection of Replication-Competent and Pseudotyped Human Immunodeficiency Virus with a Sensitive Cell Line on the Basis of Activation of an Integrated Beta-Galactosidase Gene," *J. Virol*, ~~66(5):3026-3034~~ 66(4):2232-2239 (1992) previously described an indicator cell line, herein identified as HeLa-MAGI cells. HeLa-MAGI cells are HeLa cells that have been stably transformed to express CD4 as well as integrated HIV-1 LTR which drives expression of a nuclear localized  $\beta$ -galactosidase gene. Integration of an HIV provirus in the cells leads to production of the viral transactivator, Tat, which then turns on expression of the  $\beta$ -galactosidase gene. The number of cells that stain positive with X-gal for  $\beta$ -galactosidase activity *in situ* is directly proportional to the number of infected cells.

At page 39, line 25, to page 40, line 4, please amend the paragraph as follows:

The five monoclonal antibodies raised against human 88C amino-terminal peptide were also tested for reactivity against macaque 88C (~~SEQ ID NO: X~~) (SEQ ID NO: 20) (which has two amino acid differences from human 88C within the amino-terminal peptide region). The coding regions of human 88C and macaque 88C were cloned into the expression vector pcDNA3 (Invitrogen). These expression plasmids were used to transfect COS cells using DEAE. The empty vector was used as a negative control. Three days after transfection, cells were harvested and incubated with the five anti-88C monoclonal antibodies and prepared for FACS. The results showed that four of the five antibodies (227K, 227M, 227N, 227P) recognized macaque 88C while one (227R) did not. All five antibodies recognized the transfected human 88C, and none cross-reacted with cells transfected with vector alone.